INTRODUCTION

Armand Bayou, a small coastal stream on the western shore of Galveston Bay, has been incorporated into the joint Texas General Land Office/Texas Parks & Wildlife Department Coastal Preserves Program. The Texas Legislature has provided a mechanism by which the General Land Office can lease appropriate, state-owned, coastal lands to the Parks & Wildlife Department to be managed as preserves. The Parks & Wildlife Department has authority to acquire lands for parks and wildlife management areas and habitats for nongame and endangered species, and to establish scientific areas for the purpose of preserving flora and fauna of scientific or educational value.

The Texas Coastal Preserve Program was devised to ensure long-range protection, enhancement, and public use of unique coastal natural resources. The Program seeks to achieve these goals by identifying unique coastal areas, including their fragile biological communities and important colonial waterbird nesting sites, in need of protection and actively involving all concerned and knowledgeable persons and organizations.

A crucial step toward the protection of a coastal preserve will be the development of a management plan for the preserve. This environmental inventory is designed to assist in the preparation of the management plan. Conservationists, preservationists, and environmentalists have demonstrated considerable fervor regarding Armand Bayou but essential questions remain. What are the actual resources to be preserved? What are the current conditions within the waterway? The bayou has been variously described as "Texas' last pristine bayou" (Houston Chronicle, 8/16/89), "the only bayou intact in its entire flood plain" (Chronicle, 4/24/89), and "a rare untouched 3000 acres of wilderness" (Daily Pasadena Citizen, 12/3/88). Yet the bayou is the recipient of substantial quantities of treated domestic wastewater and industrial- and residential-area stormwater. The electronic and print media have devoted considerable attention to the bayou in recent years as plans were revealed to increase the volume of treated wastewater or untreated residential stormwater discharged into it, or remove water to irrigate a golf course.

The goal of this report is to gather and integrate existing data currently held by the relevant agencies, identify data gaps, and describe the environmental attributes of the bayou relevant to development of a management plan for the coastal preserve. Specific topics to be addressed include human occupancy, physical habitat alterations, water quality trends, freshwater inflows, infrastructure, hydrological and meteorological influences, and the living resources.